

WHAT IS CLAIMED IS:

1. An interchange for a roadway system including at least one traffic lane approaching and passing through said interchange from each of four directions, said interchange comprising:

a curved portion for each traffic lane passing through said interchange;

at least one exit lane for each direction of traffic lane, said exit lanes providing a substantial right turn for traffic wishing to change a direction of travel to a direction substantially similar to a right turn;

a merging area for traffic wishing to change a direction of travel to a direction substantially similar to a left turn; and

at least one second exit lane for each direction of traffic lane, said second exit lanes passing either under or over the traffic lanes in which travel is desired and changing in elevation to merge with said merging area.

2. An interchange according to Claim 1 wherein said curved portion comprises:

a right curved portion;

a center portion extending from said right curved portion in a direction substantially the same as the direction of the traffic lane; and

a left curved portion extending from said center portion.

3. An interchange according to Claim 2 wherein said second exit lane begins adjacent a left side of said center portion of a traffic lane to be exited and ends adjacent a right side of said center portion of a traffic lane to be entered.

4. An interchange according to Claim 2 wherein said second exit lane begins adjacent a left side of said center portion of a traffic lane to be exited and ends adjacent a left side of said center portion of a traffic lane to be entered.

5. An interchange according to Claim 2 wherein said second exit lane begins adjacent a right side of said center portion of a traffic lane to be exited and ends adjacent a right side of said center portion of a traffic lane to be entered.

6. An interchange according to Claim 2 further comprising:

a service area surrounded by the traffic lanes; and

at least one of a services entrance and a services exit adjacent said second exit lane, said service entrance and said service exit providing access to and an exit from said service area.

7. An interchange according to Claim 6 wherein said services area comprises a plurality of convenience areas accessible from said service entrance and exitable via said service exit.

8. An interchange according to Claim 2 further comprising:

an access loop surrounded by the traffic lanes and substantially adjacent to and accessible from said second exit lanes;

a service area substantially encircled by said access loop and comprising one or more convenience areas; and

at least one convenience area entrance extending from said access loop to one of said convenience areas; and

at least one convenience area exit extending from said convenience area to said access loop, said access loop providing entrances to said traffic lanes via said second exit lanes.

9. A roadway system comprising:

a first road comprising one or more traffic lanes;

a second road intersecting said first road, said second road comprising one or more traffic lanes; and

an interchange configured to carry traffic through the intersection of said first road and said second road and further allowing traffic to change a direction of travel at the intersection, said interchange comprising:

a curved portion for each said traffic lane passing through said interchange;

at least one exit lane for each direction of said traffic lanes, said at least one exit lane providing a substantial right turn for traffic wishing to change a direction of travel to a direction substantially similar to a right turn;

a merging area for traffic wishing to change a direction of travel to a direction substantially similar to a left turn; and

at least one second exit lane for each direction of said traffic lanes, said second exit lanes passing either under or over said traffic lanes in which travel is desired and changing in elevation to merge with said merging area.

10. A roadway system according to Claim 9 wherein said curved portion comprises:

a right curved portion;

a center portion extending from said right curved portion; and

a left curved portion extending from said center portion.

11. A roadway system according to Claim 10 wherein said second exit lane begins adjacent a left side of said center portion of a said traffic lane to be exited and ends adjacent a right side of said center portion of a said traffic lane to be entered.

12. A roadway system according to Claim 10 wherein said second exit lane begins adjacent a left side of said center portion of a said traffic lane to be exited and ends adjacent a left side of said center portion of a said traffic lane to be entered.

13. A roadway system according to Claim 10 wherein said second exit lane begins adjacent a right side of said center portion of a said traffic lane to be exited and ends adjacent a right side of said center portion of a said traffic lane to be entered.

14. A roadway system according to Claim 10 further comprising:

a service area surrounded by said traffic lanes; and

at least one of a services entrance and a services exit adjacent said second exit lane, said services entrance and said services exit providing access to and an exit from said service area.

15. A roadway system according to Claim 14 wherein said services area comprises a plurality of convenience areas accessible from said services entrance and exitable via said services exit.

16. A roadway system according to Claim 10 further comprising:

an access loop surrounded by said traffic lanes and substantially adjacent to and accessible from said second exit lanes;

a service area substantially encircled by said access loop and comprising one or more convenience areas; and

at least one convenience area entrance extending from said access loop to one of said convenience areas; and

at least one convenience area exit extending from said convenience area to said access loop, said access loop providing entrances to said traffic lanes via said second exit lanes.

17. A method for routing traffic through an intersection between a first road and a second road while also providing an ability to exit from one of the roads to either direction of the other road, the roads having one or more traffic lanes in each direction, said method comprising:

curving a portion of each traffic lane passing through the interchange around a central area;

providing at least one exit lane for each direction of the first and second roads, the exit lane providing a substantial right turn for traffic wishing to change a direction of travel to a direction substantially similar to a right turn;

providing at least one second exit lane for each direction of the first and second roads, the second exit lanes passing either under or over the traffic lanes in which travel is desired and providing a substantial left turn for traffic wishing to change a direction of travel to a direction substantially similar to a left turn; and

providing a merging area for traffic on the second exit lanes, the merging area changing in elevation to merge with the traffic lanes to which the second exit lanes lead.

18. A method according to Claim 17 wherein providing at least one second exit lane comprises providing a second exit lane that begins adjacent a left side of a traffic lane to be exited and ends adjacent a right side of a traffic lane to be entered.

19. A method according to Claim 17 wherein providing at least one second exit lane comprises providing a second exit lane that begins adjacent a left side of a traffic lane to be exited and ends adjacent a left side of a traffic lane to be entered.

20. A method according to Claim 17 wherein providing at least one second exit lane comprises providing a second exit lane that begins adjacent a right side of a traffic lane to be exited and ends adjacent a right side of a traffic lane to be entered.